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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,013	01/31/2001	Fumihiko Sonoda	Q62082	2278

7590

12/22/2003

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EXAMINER
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EDWARDS, PATRICK L

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 12/22/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/774,013

Applicant(s)

SONODA, FUMIHIRO

Examiner

Patrick L Edwards

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 1 and 7, the metes and bounds of the phrase “reading a defective image as information related to a defect on the film” are not clear. The wording of this phrase is confusing and unclear. Appropriate correction is required.

With regard to claims 2 and 11, the metes and bounds of the phrase “preprocessing is finished up to completion of obtaining said actual image” are not clear. The wording of this phrase is confusing and unclear. Appropriate correction is required.

With regard to claims 4 and 10, the metes and bounds of the phrase “said preprocessing and said blemish elimination processing are stopped in accordance with said evaluated result” are not clear. The wording of this phrase is confusing and unclear. Appropriate correction is required.

With regard to claims 5 and 8, the metes and bounds of the phrase “imparts presence or absence of the defect” are not clear. The wording of this phrase is confusing and unclear. Appropriate correction is required.

Claims 3, 6 and 9 are rejected because they are dependent on indefinite claims.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2621

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Edgar(1) (US Patent 5,266,805). With regard to claim 7, Edgar(1) discloses reading a defective image as information related to a defect on the film (Edgar(1) column 3 line 67 – column 4 line 3). The infrared image as disclosed in Edgar(1) is analogous to a defective image as recited in the claim (Edgar(1) column 5 lines 58-61 in conjunction with Figure 1). Edgar(1) further discloses performing preprocessing for the blemish elimination processing on the the defective image (Edgar(1) column 4 lines 26-29). The determination of the map of imperfections as disclosed in Edgar(1), which shows the exact shape and location of various imperfections on the film (Edgar(1) column 5 lines 38-40) is analogous to preprocessing of the defective image as recited in the claim. Edgar(1) further discloses performing blemish elimination processing on a blemish of the actual image, based on the defective image subjected to preprocessing (Edgar(1) column 6 lines 52-58).

With regard to claim 8, Edgar(1) discloses producing flag information which imparts presence or absence of the defect on a pixel unit basis from the defective image (Edgar(1) column 8 line 66 – column 9 line 8). The recording of whether or not a pixel location is obscured by an imperfection as disclosed in Edgar(1) is analogous to the production of flag information as recited in the claim.

With regard to claim 9, Edgar(1) discloses that the defective image is photoelectrically read by using infrared light (Edgar(1) column 4 lines 23-26).

With regard to claim 10, Edgar(1) discloses that the defective image is evaluated to obtain an evaluated result (Edgar(1) column 4 lines 26-29). The map of imperfections from the infrared image as disclosed in Edgar(1) is analogous to the evaluated result as recited in the claim. With respect to the further limitation recited in the claim that preprocessing and blemish elimination processing are stopped in accordance with the evaluated result, Edgar(1) discloses that the map of imperfections, which is

Art Unit: 2621

derived from the infrared image, is used in the blemish elimination processing (Edgar(1) column 6 lines 39-58). Since the map of imperfections, which is analogous to the evaluated result as recited in the claim, is used to perform the blemish elimination processing, it follows that the preprocessing and blemish elimination processing are stopped in accordance with the evaluated result. Therefore, this further limitation is inherent in the teaching of Edgar(1).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edgar(1) in view of Edgar(2) (US Patent Application Publication 2001/0031144) and Edgar(3) (US Patent 6,393,160 B1).

The arguments as to the relevance of Edgar(1) as applied in paragraph 4 above are incorporated herein.

With regard to claim 1, Edgar(1) further discloses photoelectrically reading said image to obtain an actual image (Edgar(1) column 3 lines 47-57). The image comprised of red, green and blue light portions as disclosed in Edgar(1) is analogous to the actual image as recited in the claim. Edgar(1) does not expressly disclose reading a defective image before reading the actual image. Edgar(1) also fails to expressly disclose that the preprocessing of the defective image and the reading of the actual image are performed simultaneously. Edgar(2), however, discloses reading the defective image and then reading the actual image (Edgar(2) paragraph 0022 lines 9-12). The data corresponding to the infrared light as disclosed in Edgar(2) is analogous to the defective image as recited in the claim. The data corresponding to the visible light as disclosed in Edgar(2) is analogous to the actual image as recited in the claim.

Art Unit: 2621

Edgar(3) discloses simultaneously preprocessing the defective image and reading the actual image (Edgar(3) column 4 lines 31-48). The determination of upper and lower bounds for an infrared image as disclosed in Edgar(3) is analogous to preprocessing as recited in the claim. The visible image as disclosed in Edgar(3) is analogous to the actual image as recited in the claim.

It would have been obvious to one reasonably skilled in the art at the time of the invention to combine reading the defective image before reading the actual image as taught by Edgar(2) and simultaneously preprocessing the defective image and reading the actual image as taught by Edgar(3) with Edgar(1)'s blemish elimination system. Such a modification would have made for a system that could correct blemishes of an image while the image was being read. This would have allowed for a faster, more efficient system that required less storage and was consequently less expensive.

With regard to claim 2, which recites the further limitation that preprocessing is finished up to completion of obtaining the actual image, Edgar(3) discloses that the preprocessing of the defective image and the acquisition of the actual image are performed simultaneously (Edgar(3) column 4 lines 31-48). It follows that the preprocessing would be finished up to the completion of the actual image. Therefore, the further limitation of claim 2 is inherent in the teaching of Edgar(3).

With regard to claim 3, Figure 2 of Edgar(1) shows film being read sequentially on a plane basis. In addition, Edgar(1) discloses that the actual image is obtained and the blemish elimination processing is performed on the actual image by using said defective image subjected to said processing (Edgar(1) column 6 lines 52-58).

With regard to claim 4, Edgar(1) discloses that the defective image is evaluated to obtain an evaluated result (Edgar(1) column 4 lines 26-29). The map of imperfections from the infrared image as disclosed in Edgar(1) is analogous to the evaluated result as recited in the claim. With respect to the further limitation recited in the claim that preprocessing and blemish elimination processing are stopped in accordance with the evaluated result, Edgar(1) discloses that the map of imperfections, which is

Art Unit: 2621

derived from the infrared image, is used in the blemish elimination processing (Edgar(1) column 6 lines 39-58). Since the map of imperfections, which is analogous to the evaluated result as recited in the claim, is used to perform the blemish elimination processing, it follows that the preprocessing and blemish elimination processing are stopped in accordance with the evaluated result. Therefore, this further limitation is inherent in the teaching of Edgar(1).

With regard to claim 5, Edgar(1) discloses producing flag information which imparts presence or absence of the defect on a pixel unit basis from the defective image (Edgar(1) column 8 line 66 – column 9 line 8). The recording of whether or not a pixel location is obscured by an imperfection as disclosed in Edgar(1) is analogous to the production of flag information as recited in the claim.

With regard to claim 6, Edgar(1) discloses that the defective image is photoelectrically read by using infrared light (Edgar(1) column 4 lines 23-26).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edgar(1) as applied to claim 7, and further in view of Edgar(2) and Edgar(3). The arguments as to the relevance of the combination of Edgar(1), Edgar(2) and Edgar(3) as applied to claim 2 in paragraph 6 above are incorporated herein. All of the limitations of claim 11 have been previously addressed in the above argument with respect to claim 2.

### *Conclusion*

8. If a copy of a provisional application listed on the bottom portion of the accompanying Notice of References Cited (PTO-892) form is not included with this Office action and the PTO-892 has been annotated to indicate that the copy was not readily available, it is because the copy could not be readily obtained when the Office action was mailed. Should applicant desire a copy of such a provisional application, applicant should promptly request the copy from the Office of Public Records (OPR) in

Art Unit: 2621

accordance with 37 CFR 1.14(a)(1)(iv), paying the required fee under 37 CFR 1.19(b)(1). If a copy is ordered from OPR, the shortened statutory period for reply to this Office action will not be reset under MPEP § 710.06 unless applicant can demonstrate a substantial delay by the Office in fulfilling the order for the copy of the provisional application. Where the applicant has been notified on the PTO-892 that a copy of the provisional application is not readily available, the provision of MPEP § 707.05(a) that a copy of the cited reference will be automatically furnished without charge will not apply.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (703) 305-6301. The examiner can normally be reached on 8:30am - 5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

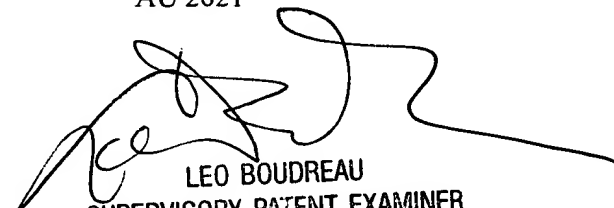
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Patrick L Edwards

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AU 2621



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